

to give a general inhalation anæsthetic through an endotracheal tube which ensures a constantly patent airway. Intravenous pentothal combined with curare may be used in adults. It is a necessary precaution, however, to apply a local anæsthetic to the larynx and insert an endotracheal tube before passing the œsophagoscope. If this is not done, laryngeal spasm will frequently occur and the procedure will be delayed. I personally prefer an inhalation anæsthesia rather than an intravenous one for œsophagoscopy.

The relaxation of the œsophagus obtained under general anæsthesia makes removal of foreign bodies and even diagnostic œsophagoscopy a much easier and, I believe, a safer procedure. Cases, however, which require frequent examination and treatment may be done safely under local. This applies to strictures of the œsophagus and possibly some cases of cardio-spasm. The first examination, however, is in my

opinion best done under general anæsthesia.

SUMMARY

1. Newer anæsthetic drugs and improved training of anæsthesiologists have widened the scope of general anæsthesia in endoscopy.

2. Local anæsthetic agents are toxic drugs and can give serious and even fatal reactions. They should always be carefully measured and applied and the necessary drugs and equipment to combat reactions should always be ready for instant use.

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HOMOSEXUALITY AS A SOURCE OF VENEREAL DISEASE*

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PENICILLIN is responsible for a dual trend in the overall picture of syphilis today. On one hand, the apparent ease of administration, efficacy and freedom from serious reactions and short duration of treatment, have resulted in what appears to be a marked decrease in the incidence of early syphilis; whilst on the other hand, the simplification and relative innocuousness of treatment have lulled the profession into a sense of victory, smugness and lack of interest, which is apparently becoming manifest in both teaching¹ and case finding.

In British Columbia, the decrease in incidence of early syphilis has been striking, as illustrated in Fig. 1. It is felt that many factors are responsible, including a post-war return to the influence of home environment, as well as penicillin.

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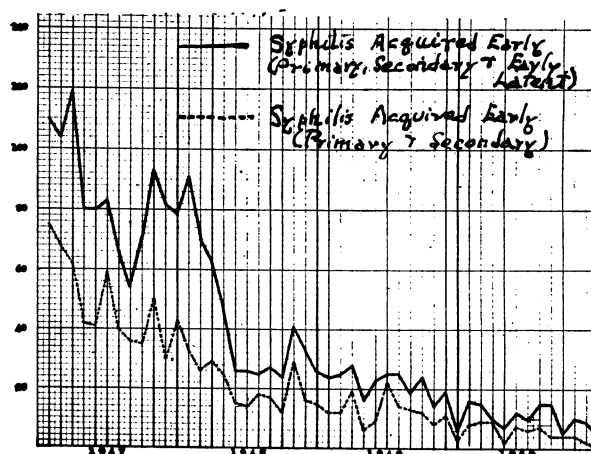


Fig. 1.—Graphic presentation of the incidence of early syphilis in British Columbia from 1947 to 1951.

In our endeavour to decrease the reservoir of early syphilis, we are employing multiple methods of attack, including education, supplying of free penicillin to private physicians for the treatment of venereal disease, as well as various epidemiological procedures in regard to case finding, case holding and contact tracing. In the past year, we have decided to over-treat gonorrhœa with a single injection of 1.5 million units of penicillin G. in procaine and oil with aluminum monostearate, thereby treating any possibly concomitantly incubating syphilis.

It is to be noted that whereas there is a marked decrease in early syphilis since 1947, there is very little change in the incidence of gonorrhœa, see Fig. 2; this may be accounted for to

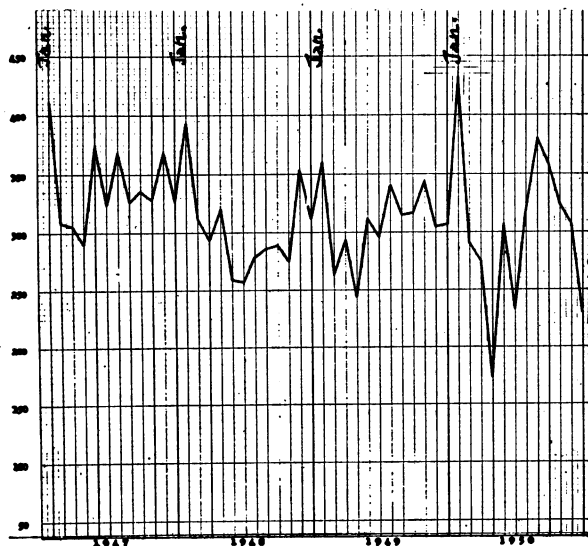


Fig. 2.—Graphic presentation of the incidence of gonorrhœa in British Columbia from 1947 to 1951.

some extent by the short incubation period for gonorrhœa and the high rate of re-infections. If this premise is correct, then the favourable downward trend in the incidence of early syphilis is more likely to be attributable to penicillin than to an improvement in the morality of society.

In the past twelve months, we have been forcibly made aware of a hitherto unsuspected source of the spread of venereal disease, namely homosexuality. Up to 1948, there was no reported case. In 1949, we saw three cases, whereas in 1950, there were 20 cases, which can be subdivided into 11 cases of early syphilis, and 9 cases of gonorrhœa.

It is of interest to note that out of a total of 64 cases of early (primary, secondary and early latent) syphilis notified in British Columbia in 1950, 11 (or 17%) were contracted as a result of homosexual practices.

These figures are sufficiently disturbing in themselves, but become even more so when it is realized that these cases were all investigated in the main Vancouver Clinic, which was responsible for notifying only 19 cases of early (primary, secondary and early latent) syphilis during the year.

If 11 of the 19 cases (or 57%) notified at the Vancouver Clinic were acquired as a result of

homosexual practices, the question arises as to the number of infections notified by private physicians which were likely to have been acquired in a similar manner.

It is difficult to estimate the amount of homosexual activity taking place in a community, but the impression gained from reports of contacts attending the main Vancouver Clinic would lead to the belief that the practice is increasing to an alarming extent. This belief would appear to be supported by the amount of venereal disease for which it has been responsible.

It is difficult to determine the underlying causes responsible for the spread of homosexual activity. Some of the dubious rationalizing causes which have been put forward by the patients themselves are: the greater ease of association between men, which does not attract the suspicion and disapproval of neighbours; the greater ease of covering up homosexual activities; the erroneously imagined freedom from the dangers of venereal disease; the development of the male "prostitute" which has been found to be quite a lucrative means of supplementing an inadequate income. The increasing prevalence of alcoholism and drug addiction, besides entailing a considerable additional financial burden, frequently is associated with some degree of psychological deterioration.

These may be possible factors, but there are others of a more subtle nature arising from personality changes or disorganizations which may be intrinsic in the individual or extrinsic with its origins in the family or social environment.

Homosexual behaviour is a practice which is unfortunately very liable to spread in a youthful community. In our series, there was 1 female, white and single, and 19 males. Of the males, 17 were white, 1 was Chinese, and 1 was part Indian. The entire group, except for 1 married male and 1 widower, was single. The age incidence was as follows, 2 were in their teens, 11 in the twenties, 3 in their thirties, 2 in their forties, and 1 was 59 years of age. These findings, regarding age distribution in the unmarried homosexual, are in keeping with those reported by Kinsey *et al.*²

The means of checking this spread are not at the present time apparent. The devotees of this practice are apparently of two principal types:

(a) those who are ashamed of their abnormal behaviour; and (b) those who have adjusted themselves to it and have completely rationalized their feelings towards it.

The first group can frequently be approached from the psychiatric angle, whereas the latter group are apparently unassailable.

The purpose of this short article is not primarily to discuss the methods for dealing with

homosexuality in any given community, but rather to bring it to general notice as an increasingly prevailing practice which presents new problems, and is assuming an alarming importance in the dissemination of venereal disease.

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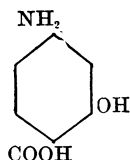
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PARA-AMINO-SALICYLIC ACID WITH STREPTOMYCIN IN PULMONARY TUBERCULOSIS

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IN 1940, Bernheim,¹ studying the metabolism of the tubercle bacillus, made observations on the uptake of oxygen by this organism. Among these was the apparently purposeless finding that benzoic and salicylic acid accelerated the uptake of oxygen by growing tubercle bacilli. Many related compounds were then studied in an effort to find one which would produce the opposite effect on the oxidation-reduction mechanism of the microbe, *i.e.*, inhibit or diminish the uptake of oxygen. In 1944, Lehmann² in Sweden found that there was a reversal of oxygen uptake if an amino group was placed in the para position in the salicylic acid molecule thus,



Animal experimentation and clinical trial on human cases followed and clinical evidence is still being accumulated.

It was in 1944 also that Schatz, Bugle and Waksman³ introduced streptomycin and the value of this antibiotic against tuberculosis has been well demonstrated. It is the consensus so far that para-amino-salicylic acid (PAS) is

somewhat inferior to streptomycin in its effect on human tuberculosis. Both drugs have desirable and undesirable effects. Of the undesirable effects the most noteworthy are the gastrointestinal irritation produced by PAS and the 8th nerve damage which can be caused by streptomycin.

Among the defects of the latter, tubercle bacillus resistance against the effect of streptomycin ranks very highly; and it has been estimated that after sixty days' treatment with streptomycin, about 50% of patients so treated will exhibit tubercle bacilli resistant to the streptomycin. With longer therapeutic courses the percentage rises. With PAS such resistance seems to develop very much more slowly and only about 12% of cases will show resistant strains to this therapeutic agent.⁴

When the two drugs are combined the incidence of streptomycin resistance in prolonged courses drops from about 75% to about 40% and it is also noteworthy that strains which are resistant to one drug are not necessarily resistant to the other, so that by giving a combination of the two drugs a therapeutic effect can be maintained much better than by using the drugs singly.

Moreover, experiments *in vitro* (Vennesland *et al.*⁵), and on guinea pigs (Feldman *et al.*⁶) have established the fact that there is an apparently synergistic action between the two drugs so that anti-tuberculosis effect of combined therapy is greater than the effect of either drug alone. These observations form the rationale for the use of this combined therapy in tuberculosis.

The optimum method of using these preparations is still in doubt. Dosage schedules of varying types and combinations are used by various men with seemingly good effects. Since streptomycin is already well known, a word or two

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